



Challenge 1: Be a Power Saver

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Save Our Energy, Bank Your Money!

Why take the Power Saver Challenge?

- Reduce utility bills and save money!
- Improve the comfort, value, and durability of your home!
 - Do the right thing for your kids', country's, and planet's future!
 - Be recognized and inspire others!
 - Earn special incentives and prizes!

What's Involved?

- Learn about your household's energy use,
- Assess your home's performance with a home energy audit and make a plan,
 - Implement energy saving projects and actions, and
 - Track your energy use and earn rewards for savings!

Challenge 1: Be a Power Saver!

According to the U.S. Energy Information Administration (EIA), buildings are responsible for 41% of all energy consumption and greenhouse gas emissions annually, and the residential sector alone accounts for 22%. The Power Saver household featured on page 11 demonstrates that, with minimal to moderate investment, achieving significant energy savings is possible. While saving 10,000 kWh per year may not be feasible for every household, when energy savings of just 1,000 kWh are multiplied by 115 million U.S. households (2010 Census estimate), the impact is tremendous and supports the claim that energy efficiency is one of the most cost effective ways to tackle our nation's energy, economic and environmental challenges.

If the estimated 87,000 households in Frederick County each saved just 1,000 kWh per year, that savings would be enough to power nearly 10 % of households in the County (8,267 households based EIA's average usage for U.S. homes).

If every household in the nation saved 1,000 kWh/year, the energy savings would be enough to power 11 million households! That's more than all the households in Maryland, Pennsylvania, Virginia, West Virginia and Delaware combined!

Saving energy is something every one of us can do in our homes right now! Lessen the impact of rising energy costs and reap the financial benefits of energy savings that add up year after year, a guaranteed return on investment.

Get started today! Make a difference and Be a Power Saver!

Already an Energy Saver?

If you think your household is already an exemplary energy saver, and you've already had a Home Energy Audit, you can use the CHALLENGE to certify your home, be recognized, and earn rewards. Register with the Green Homes Challenge, check off actions already taken that total 50 Green Points, sign up with EarthAid.net/FrederickCounty, and submit your certification form.



Meet Some Frederick County Power Savers

32% Savings over 3 Years



A few years ago, this Frederick County household decided it was time to stop thinking like energy conscious citizens and start acting like them. For years they had known about the things they should be doing, but were they actually doing them? No! They had busy lives and becoming more energy efficient did not require them to be someplace or do something by a certain time, so they just never got around to it.

They lived in a 2,400 sq. ft. 1850's brick house with electric baseboard heat in each room, spotty insulation, and very drafty windows; they knew they had some big challenges, but they began with the basics:

1. They replaced all light bulbs with CFLs, put up a clothes line, insulated their hot water heater and pipes, and turned down the water temperature to 120 degrees;
2. They invested in an energy efficient refrigerator, ceiling fans, and insulation upgrades in their attic and basement;
3. They installed water-saving devices like a low-flow showerhead and a dual flush toilet conversion kit; and
4. They changed their behaviors –
 - While their TV and computer system had always been plugged into power-strips, they turned them all the way off every single night;
 - They hung all their laundry to dry outside in good weather and inside in bad. They used the dryer for just a few minutes to eliminate wrinkles in shirts and scratchiness in towels, and hangers as mini-clotheslines to economize on space.
 - To get around the uncertainty of estimated meter readings, they read their power meter each month and called it in to Allegheny Power. They tracked and graphed their monthly energy use and costs in a spreadsheet, and later registered with EarthAid.net.

After one year, their annual kilowatt hour total was down 17%; after two years, it was down more than 30%. By the third year, it was down 32% resulting in savings of almost 10,000 kWh per year! Over the three years, they had saved a total of \$1,422 -- that more than covered the cost of the insulation project. Even when electricity rates began increasing in 2008, they were still paying less!

